Geophysical Research Abstracts, Vol. 10, EGU2008-A-06052, 2008 SRef-ID: 1607-7962/gra/EGU2008-A-06052 EGU General Assembly 2008 © Author(s) 2008



Restoration of historical stone sculptures carved from chlorite-talc schists and soapstone in the Czech Republic

Gajda J. (1), Přikryl R. (2), Vavro M. (3), Martinec P. (4)

(1) Academy of Fine Arts in Prague, Studio of Sculptural Works of Art Restoration, Prague, Czech Republic, (2) Institute of Geochemistry, Mineralogy and Mineral Resources, Faculty of Science, Charles University in Prague, Albertov 6, 128 43 Prague 2, Czech Republic; phone: +420-221951500, fax: +420-221951496, e-mail: prikryl@natur.cuni.cz, (3) VSB-Technical University of Ostrava, Faculty of Civil Engineering, Ostrava, Czech Republic, (4) Institute of Geonics, Academy of Sciences of the Czech Republic, Ostrava, Czech Republic

Chlorite-talc schists and soapstones represent a unique natural building and decorative stone that was widely employed namely in Nordic countries. This extraordinary material was also quarried in limited extent in the Czech Republic. From the second half of 17^{th} century till the first years of the 20^{th} century, different facial types of chlorite schists were used as refractory material and for sculptural purposes in Sobotín amphibolite massif area (Šumperk district, northern Moravia). Numerous chlorite-talc schists monuments are registered in 18 villages.

Restoration of soapstones monuments (e.g. St. John of Nepomuk statue near the church in Vernířovice) was in the history realized by mortars based on grey cement. A novel approach was adopted in the case of the cross with Christ's corpus that is placed near the Baroque wooden church of St. John of Nepomuk in the Klepáčov village. The technique of restoration was led by an attempt to preserve colour authenticity of newly applied materials and with attention paid to extreme climatic conditions of the locality (mountainous area). The acrylate resin Paraloid B 72 was used for all periods of restoration process. The final thin layer on the statue surface was prepared from acrylate resin mixed by soapstone powder. This powder was prepared from the rock taken at one of historical quarries.